



12423 NE Whitaker Way
Portland, OR 97230
503-254-1794



Report Number: 23-006610/D002.R000
Report Date: 06/12/2023
ORELAP#: OR100028
Purchase Order:
Received: 06/05/23 11:43

Customer: NW Natural Goods
Product identity: HEMP - LM 0081
Client/Metric ID: .
Laboratory ID: 23-006610-0001

Summary

Potency:

Analyte per 4g	Result	Limits	Units	Status	
CBC per 4g	0.224		mg/4g		CBD-Total per Serving Size 26.1 mg/4g
CBD per 4g	26.1		mg/4g		
CBG per 4g	0.768		mg/4g		THC-Total per Serving Size <LOQ
(Reported in milligrams per serving)					

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

Analyte	Result (mg/kg)	Limits (mg/kg)	Status
Multi-Residue Pesticide Profile	< LOQ for all analytes		

Metals:

Less than LOQ for all analytes.

Microbiology:

Less than LOQ for all analytes.



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503-254-1794



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Customer: NW Natural Goods

Product identity: HEMP - LM 0081

Client/Metric ID: .

Sample Date:

Laboratory ID: 23-006610-0001

Evidence of Cooling: No

Temp: 18.7 °C

Relinquished by: Ramos

Serving Size #1: 4 g

Sample Results

Potency per 4g Method: J AOAC 2015 V98-6 (mod) ^b Units mg/se Batch: 2307961 Analyze: 6/6/23 6:20:00 PM					
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 4g	0.224		mg/4g	0.128	
CBC-A per 4g	< LOQ		mg/4g	0.128	
CBC-Total per 4g	< LOQ		mg/4g	0.240	
CBD per 4g	26.1		mg/4g	0.128	
CBD-A per 4g	< LOQ		mg/4g	0.128	
CBD-Total per 4g	26.1		mg/4g	0.240	
CBDV per 4g	< LOQ		mg/4g	0.128	
CBDV-A per 4g	< LOQ		mg/4g	0.128	
CBDV-Total per 4g	< LOQ		mg/4g	0.239	
CBE per 4g	< LOQ		mg/4g	0.128	
CBG per 4g	0.768		mg/4g	0.128	
CBG-A per 4g	< LOQ		mg/4g	0.128	
CBG-Total per 4g	0.768		mg/4g	0.239	
CBL per 4g	< LOQ		mg/4g	0.128	
CBL-A per 4g	< LOQ		mg/4g	0.128	
CBL-Total per 4g	< LOQ		mg/4g	0.240	
CBN per 4g	< LOQ		mg/4g	0.128	
CBT per 4g	< LOQ		mg/4g	0.128	
Δ8-THCV per 4g	< LOQ		mg/4g	0.128	
Δ10-THC-9R per 4g	< LOQ		mg/4g	0.128	
Δ10-THC-9S per 4g	< LOQ		mg/4g	0.128	
Δ10-THC-Total per 4g	< LOQ		mg/4g	0.256	
Δ8-THC per 4g	< LOQ		mg/4g	0.128	
Δ9-THC per 4g	< LOQ		mg/4g	0.128	
delta-9-THCP per 4g	< LOQ		mg/4g	0.128	
exo-THC per 4g	< LOQ		mg/4g	0.128	
THC-A per 4g	< LOQ		mg/4g	0.128	
THC-Total per 4g	< LOQ		mg/4g	0.240	
THCV per 4g	< LOQ		mg/4g	0.128	
THCV-A per 4g	< LOQ		mg/4g	0.128	
THCV-Total per 4g	< LOQ		mg/4g	0.240	
Total Cannabinoids per 4g	27.1		mg/4g		



Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2307935	06/08/23 AOAC 991.14 (Petrifilm) ^p		
Total Coliforms	< LOQ		cfu/g	10	2307935	06/08/23 AOAC 991.14 (Petrifilm) ^p		
Mold (RAPID Petrifilm)	< LOQ		cfu/mL	10	2307936	06/08/23 AOAC 2014.05 (RAPID) ^p		
Yeast (RAPID Petrifilm)	< LOQ		cfu/mL	10	2307936	06/08/23 AOAC 2014.05 (RAPID) ^p		

Solvents

Method: Residual Solvents by GC/MS^p **Units** µg/g **Batch** 2307994 **Analyze** 06/07/23 02:21 PM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
1,4-Dioxane	< LOQ	380	100	pass		2-Butanol	< LOQ	5000	200	pass	
2-Ethoxyethanol	< LOQ	160	30.0	pass		2-Methylbutane (Isopentane)	< LOQ		200		
2-Methylpentane	< LOQ		30.0			2-Propanol (IPA)	< LOQ	5000	200	pass	
2,2-Dimethyl butane	< LOQ		30.0			2,2-Dimethylpropane (neo-pentane)	< LOQ		200		
2,3-Dimethyl butane	< LOQ		30.0			3-Methylpentane	< LOQ		30.0		
Acetone	< LOQ	5000	200	pass		Acetonitrile	< LOQ	410	100	pass	
Benzene	< LOQ	2.00	1.00	pass		Butanes (sum)	< LOQ	5000	400	pass	
Cyclohexane	< LOQ	3880	200	pass		Ethyl acetate	< LOQ	5000	200	pass	
Ethyl benzene	< LOQ		200			Ethyl ether	< LOQ	5000	200	pass	
Ethylene glycol	< LOQ	620	200	pass		Ethylene oxide	< LOQ	50.0	20.0	pass	
Hexanes (sum)	< LOQ	290	150	pass		Isopropyl acetate	< LOQ	5000	200	pass	
Isopropyl benzene (Cumene)	< LOQ	70.0	30.0	pass		m,p-Xylene	< LOQ		200		
Methanol	< LOQ	3000	200	pass		Methylene chloride	< LOQ	600	60.0	pass	
Methylpropane (Isobutane)	< LOQ		200			n-Butane	< LOQ		200		
n-Heptane	< LOQ	5000	200	pass		n-Hexane	< LOQ		30.0		
n-Pentane	< LOQ		200			o-Xylene	< LOQ		200		
Pentanes (sum)	< LOQ	5000	600	pass		Propane	< LOQ	5000	200	pass	
Tetrahydrofuran	< LOQ	720	100	pass		Toluene	< LOQ	890	100	pass	
Total Xylenes	< LOQ		400			Total Xylenes and Ethyl benzene	< LOQ	2170	600	pass	

Pesticides

Method: AOAC 2007.01 & EN 15662 (mod)^p **Units** mg/kg **Batch** 2308067 **Analyze** 06/09/23 12:16 PM

Analyte	Result	Limits	Status	Notes
Multi-Residue Pesticide Profile	< LOQ for all analytes			



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Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Arsenic*	< LOQ	0.200	mg/kg	0.0170	2308044	06/08/23 AOAC 2013.06 (mod.) ^b	pass	
Cadmium*	< LOQ	0.200	mg/kg	0.0170	2308044	06/08/23 AOAC 2013.06 (mod.) ^b	pass	
Lead*	< LOQ	0.500	mg/kg	0.0170	2308044	06/08/23 AOAC 2013.06 (mod.) ^b	pass	
Mercury*	< LOQ	0.100	mg/kg	0.00848	2308044	06/08/23 AOAC 2013.06 (mod.) ^b	pass	

Nutrition

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Moisture (Loss on Drying)	16.8		g/100g	0.10	2308005	06/07/23 AOAC 925.10 (mod.) ^b		
Water Activity	0.656		Aw	0.030	2307990	06/07/23 AOAC 978.18 ^b		

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.
Testing in accordance with: OAR 333-007-0390 OAR 333-007-0400 OAR 333-007-0410 OAR 333-007-0430



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Abbreviations

Limits: Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220, CCR title 16-division 42. BCC-section 5723

Limit(s) of Quantitation (LOQ): The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

Ⓛ = ISO/IEC 17025:2017 accredited method.

Ⓜ = TNI accredited analyte.

Units of Measure

cfu/g = Colony forming units per gram

cfu/mL = Colony forming units per milliliter

g = g

g/100g = Grams per 100 Grams

µg/g = Microgram per gram

mg/kg = Milligram per kilogram = parts per million (ppm)

mg/4g = Milligram per 4g

% = Percentage of sample

Aw = Water Activity

% wt = µg/g divided by 10,000

Approved Signatory

Derrick Tanner
General Manager



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Cannab s Mu t -Res due Prof e, L m ts of Quant tat on

Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)
Abamec in	0.100	Cle hodim	0.050	ndrin	0.100
Acepha e	0.100	Cle hodim Sul one	0.050	PN	0.050
Acequinocyl	0.100	Cle hodim Sul oxide	0.050	PTC	0.100
Ace amiprid	0.020	Clo en ezine	0.020	s envalera e/ envalera e	0.200
Ace ochlor	0.100	Clomazone	0.020	aconazole	0.100
Acrina hrin	0.100	Clo hianidin	0.200	hal luralin	0.100
Alachlor	0.100	Coumaphos	0.050	hio encarb	0.050
Aldicarb	0.100	Cro oxyphos	0.020	hion	0.200
Aldicarb sul oxide	0.100	Cyanazine	0.020	hirimol	0.100
Aldoxycarb (Aldicarb-sul one)	0.100	Cyano enphos	0.020	ho umesa e	0.050
Aldrin	0.100	Cyan riliprole	0.050	hoprophos	0.020
Ame ocr radin	0.020	Cyazo amid	0.020	o enprox	0.020
Ame ryn	0.500	Cycloa e	0.100	oxazole	0.020
Aspon	0.100	Cy lu hrin	0.200	ridiazole	0.100
Asulam	0.100	Cyhalo hrin, lambda	0.200	rim os	0.020
A razine	0.100	Cymoxanil	0.050	amoxadone	0.200
A razine-dese hyl	0.100	Cyperme hrin	0.200	amphur	0.100
Azinphos-e hyl	0.020	Cyprodinil	0.100	enamidone	0.020
Azinphos-me hyl	0.020	Dac hal	0.100	enamiphos	0.020
Azoxys robin	0.020	Daminozide	0.100	enamiphos sul one	0.020
Benalaxyl	0.020	DCPMU	0.050	enamiphos sul oxide	0.020
Bendiocarb	0.020	DDD, o,p'-	0.100	enazaquin	0.100
Ben luralin	0.100	DDD, p,p'-	0.100	enbuconazole	0.100
Benoxacor	0.050	DD , o,p'-	0.100	enchlorphos	0.100
Bensulide	0.050	DD , p,p'-	0.100	enchlorphos-oxon	0.100
B C alpha isomer	0.100	DDT, o,p'-	0.100	enhexamid	0.100
B C be a isomer	0.100	DDT, p,p'-	0.100	eni ro hion	0.100
B C del a isomer	0.500	D (Tribu os)	0.100	enobucarb	0.050
Bi enaza e	0.020	Del ame hrin	0.100	enoxycarb	0.020
Bi en hrin	0.020	Desmedipham	0.100	enpropa hrin	0.050
Boscalid	0.020	Dialla e	0.100	enpyroxima e	0.020
Bromophos-e hyl	0.100	Diazinon	0.020	enson	0.100
Bromophos-me hyl	0.200	Diazoxon	0.100	ensul o hion	0.020
Bromopropyla e	0.100	Dichlobenil	0.100	ensul o hion oxon	0.020
Bromuconazole	0.100	Dichlo luanid	0.100	ensul o hion sul one	0.100
Bupirima e	0.020	Dichlorvos	0.100	Fensulfiothion-oxon-sulfone	0.020
Bupro ezin	0.050	Diclobu razol	0.050	en hion	0.050
Bu achlor	0.500	Dico ol	0.100	en hion oxon	0.020
Bu ralin	0.200	Dicro ophos	0.050	en hion oxon sul one	0.100
Bu yla e	0.100	Dieldrin	0.100	en hion sul one	0.050
Cadusa os	0.020	Die ho encarb	0.020	enuron	0.020
Cap an	1.000	Die hyl oluamide (D T)	0.050	ipronil	0.100
Carbaryl	0.050	Di enoconazole	0.100	lonicamid	0.100
Carbendazim	0.100	Dime henamid	0.050	luchloralin	0.100
Carbo uran	0.020	Dime hoa e	0.050	lucy hrina e	0.100
Carbopheno hion	0.200	Dime homorph	0.050	ludioxonil	0.200
Carboxin	0.020	Diniconazole	0.200	lu enace	0.020
Car en razone-e hyl	0.100	Dino e uran	0.200	lumioxazin	0.100
Chloran riliprole	0.020	Dioxa hion	0.100	luome uron	0.020
Chlordane, cis-	0.200	Diphenamid	0.020	luopicolide	0.050
Chlordane, rans-	0.200	Diphenylamine	0.100	luopyram	0.020
Chlor enapyr	0.500	Disul o on	0.100	luoxas robin	0.050
Chlor enson	0.200	Disul o on sul one	0.100	lupyradi urone	0.020
Chlor envinphos	0.050	Disul o on sul oxide	0.100	luridone	0.100
Chlorobenzila e	0.100	Diuron	0.050	lusilazole	0.020
Chloroneb	0.200	di enphos	0.050	lu olanil	0.020
Chlorpyri os	0.050	ndosul an alpha	0.200	lu ria ol	0.020
Chlorpyri os-me hyl	0.200	ndosul an be a	0.200	luvalina e, au-	0.100
C PC	1.000	ndosul an sul a e	0.100	luxapyroxad	0.020



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Cannabis Multiresidue Profile, Limits of Quantitation

Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)
omethoprene	0.100	Mexacarbene	0.020	Propamocarb	0.050
onon	0.100	MGK 264	0.020	Propanil	0.050
orchlorfenuron	0.050	Mirex	0.100	Propargilene	0.050
ormetamfen	0.050	Molinaene	0.050	Propazine	0.020
uracil	0.020	Monocrotophos	0.100	Properamphos	0.050
epachlor	0.100	Monolinuron	0.020	Propham	0.050
epachlor epoxide	0.100	Myclobutanil	0.050	Propiconazole	0.050
epenophos	0.100	Naled	0.100	Propoxur	0.050
exachlorobenzene	0.100	Napropamide	0.050	Propoxycarbazona Na	0.050
exaconazole	0.100	Neburon	0.020	Propyzamide	0.050
exazinone	0.100	Nipyrin	0.100	Prothion	0.100
oxyazox	0.020	Norflurazon	0.050	Pyraclostrobin	0.020
mazalil	0.100	Ormetoate	0.100	Pyrazophos	0.050
midacloprid	0.100	O-Phenylphenol	0.100	Pyrethrins	0.050
ndaziflam	0.020	Oxadixyl	0.100	Pyridaben	0.020
ndoxacarb	0.020	Oxamyl	0.100	Pyridaol	0.100
probenos	0.100	Oxamyl-oxime	0.100	Pyridaene	0.020
prodione	0.100	Oxydemeton-methyl	0.100	Pyrimethanil	0.050
sobenzan	0.100	Oxydemeton-methyl	0.100	Pyriproxyfen	0.020
socarbophos	0.500	Oxydemeton-methyl	0.200	Pyroxasulfone	0.020
sodrin	0.100	Paclobutrazol	0.050	Pyroxsulam	0.020
sofenphos	0.050	Paraoxon-methyl	0.020	Quinalphos	0.050
sofenphos-methyl	0.020	Paraoxon-methyl	0.100	Quinoxifene	0.050
sofenphos oxon	0.050	Parathion-methyl	0.100	Quinazone (PCNB)	0.200
soprocab	0.020	Parathion-methyl	0.200	Resmethrin	0.050
sopropalin	0.200	Penconazole	0.050	Roctenone	0.050
sopropylolane	0.050	Pendimethalin	0.050	S421	0.100
sopronuron	0.050	Penfluthrin	0.020	Simazine	0.100
soxaben	0.050	Penfluthrin	0.100	Simeonin	0.200
soxalufen	0.050	Penfluthrin	0.100	Spinetoram	0.020
Kresoxim-methyl	0.050	Penfluthrin	0.100	Spinosad	0.050
acifluorfen	0.500	Penfluthrin	0.100	Spirodiclofen	0.100
enail	0.100	Pentachlorothioanisole (PCTA)	0.100	Spiromesifen	0.050
indane (gamma B C)	0.100	Penhiopyrad	0.020	Spirothram	0.050
inuron	0.020	Permethrin	0.050	Spiroxamine	0.020
Malaoxon	0.050	Permethrin	0.100	Sulfofen	0.050
Malaion	0.050	Phenmedipham	0.050	Sulfoxalor	0.050
Mandipropamid	0.020	Phenothiazine	0.050	Sulproso	0.020
Mecarbam	0.020	Phenothiazine	0.050	Tebuconazole	0.100
Mepanipyrim	0.050	Phenothiazine	0.050	Tebuconazole	0.020
Merphos	0.500	Phosalone	0.050	Tebuhiuron	0.020
Mealaxyl	0.050	Phosmet	0.100	Tecnazene	0.100
Mealdehyde	0.050	Phosphamidon	0.050	Tebufenozide	0.100
Meconazole	0.100	Phoxim	0.050	Terbufos	0.020
Meclorfen	0.100	Pinoxaden	0.020	Terbufosulfone	0.050
Meclorfen	0.050	Piperonyl butoxide	0.050	Terbufosulfone	0.050
Meclorfen	0.050	Pirimicarb	0.020	Terbufosulfone	0.020
Meclorfen	0.050	Pirimiphos-methyl	0.050	Terbufosulfone	0.020
Meclorfen	0.100	Pirimiphos-methyl	0.020	Terbufosulfone	0.050
Meclorfen	0.100	Prallethrin	0.100	Terbufosulfone	0.050
Meclorfen	0.100	Prochloraz	0.020	Terbufosulfone	0.200
Meclorfen	0.100	Procymidone	0.100	Terbufosulfone	0.050
Meclorfen	0.020	Profluthrin	0.100	Terbufosulfone	0.100
Meclorfen	0.050	Profluthrin	0.100	Thiabendazole	0.100
Meclorfen	0.100	Promecarb	0.050	Thiabendazole, 5-hydroxy	0.100
Meclorfen	0.050	Promethin	0.100	Thiacloprid	0.050
Meclorfen	0.050	Promethin	0.020	Thiamethoxam	0.100
Meclorfen	0.100	Propachlor	0.020	Thiobencarb	0.050
Mevinphos	0.100			Thiodicarb	0.050
				Thiophanate-methyl	0.050



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Cannab s Mu t -Res due Prof e, L m ts of Quant tat on

Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)
Tolclo os-me hyl	0.100	Triazophos	0.020	Tri loxys robin	0.020
Tri orin	0.100	Tolyl luanid	0.050	Tri iconazole	0.050
Tralkoxydim	0.100	Tridiphane	0.500	Vinclozolin	0.100
Triadime on	0.050	Tri lumizole	0.020	Zoxamide	0.020
Trialla e	0.100	Tri luralin	0.100		

LOQ = Limit of Quantitation, mg/kg

Factors affecting the LOQ include instrument sensitivity or a particular analyte, sample size, moisture content (percent solids) of the sample, efficiency of the cleanup on the sample extract, and especially the type of sample matrix.



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Hemp & Cannabis: Usable / Extract / Finished Product

Northeast-Natural-

Chain of Custody, Record

Goods-1685742291

OREAP ID OR100028 ANAB ISO 17025 IDAT1508

Project Information			Testing							
<div>Project Name: <u>HEMP - LM 0081</u></div> <div>PO Number: <u>N/A</u></div> <div>Turnaround Time: <u>5 Business Days (standard) (required for microbial testing)</u></div> <div>Samples Delivered to Laboratory: <u>Schedule Pick-Up</u></div> <div>Cannabis Type: <u>Industrial</u></div> <div>Pick-Up Location:</div> <div>Street Address: <u>11781 SE HWY 212 #404</u></div> <div>City, State, Zip: <u>Clackamas, Oregon 97015</u></div> <div>Pick-Up Location Phone: <u>38656690210</u></div>			Heavy Metals Profile OR (As, Cd, Pb & Hg)	Moisture as Loss on Drying	Pesticide - Multi-Residue Profile	Potency Cannabinoid Basic + Extended Profile	Residual Solvents - OR	Total Coliforms + E. Coli	Water Activity	Yeast and Mold
#	Sample Name	Sample Material	Amount Provided							
1	HEMP - LM 0081	Edible	20 units for sale	✓	✓	✓	✓	✓	✓	
Relinquished By: <u>Kristen Johnson</u>			Date: <u>6/2/2023</u>	Time: <u>14:44</u>	Received By: <u>BR</u>		Date: <u>6/5/2023</u>	Time: <u>10:18</u>	Received Temp., °C: <u>18.7</u>	
Temp., °C: <u>18.7</u>					Evidence of Cooling?: <u>No</u>					

Samples submitted to Columbia Laboratories with testing requirements constitute an agreement for services in accordance with the [current terms of services](#) associated with this OOC. By signing "Relinquished by" you are agreeing to these terms.

Columbia Laboratories
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Revision: 1 Document D: 7148
Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

JAOAC2015 V986 Batch ID: 2307961

Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes	
CBDA	2	0.0293	0.0283	%	103	80.0 - 120	Acceptable		
CBV	2	0.0300	0.0291	%	103	80.0 - 120	Acceptable		
CBE	2	0.0357	0.0344	%	104	80.0 - 120	Acceptable		
CBDA	1	0.0321	0.0324	%	99.1	90.0 - 110	Acceptable		
CBGA	1	0.0324	0.0328	%	98.7	80.0 - 120	Acceptable		
CBG	1	0.0336	0.0340	%	98.8	80.0 - 120	Acceptable		
CB	1	0.0342	0.0343	%	99.7	90.0 - 110	Acceptable		
THCV	2	0.0212	0.0201	%	105	80.0 - 120	Acceptable		
deltaTHCV	2	0.0274	0.0268	%	102	80.0 - 120	Acceptable		
THCVA	2	0.0310	0.0299	%	104	80.0 - 120	Acceptable		
CBN	1	0.0342	0.0347	%	98.6	80.0 - 120	Acceptable		
exo-THC	2	0.0303	0.0292	%	104	80.0 - 120	Acceptable		
deltaTHC	1	0.0342	0.0351	%	97.5	90.0 - 110	Acceptable		
deltaTHC	1	0.0424	0.0428	%	99.1	90.0 - 110	Acceptable		
9SdeltaTHC	1	0.0241	0.0246	%	97.8	80.0 - 120	Acceptable		
CB	2	0.0336	0.0315	%	107	80.0 - 120	Acceptable		
9RdeltaTHC	1	0.0324	0.0330	%	98.2	80.0 - 120	Acceptable		
CB	2	0.0315	0.0309	%	102	80.0 - 120	Acceptable		
THCA	1	0.0326	0.0332	%	98.2	90.0 - 110	Acceptable		
CBGA	2	0.0337	0.0326	%	103	80.0 - 120	Acceptable		
CBLA	2	0.0339	0.0331	%	103	80.0 - 120	Acceptable		
deltaTHCP	2	0.0332	0.0321	%	103	80.0 - 120	Acceptable		
CB	2	0.0332	0.0327	%	102	80.0 - 120	Acceptable		

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDA	<LOQ	0.00325	%	< 0.00325	Acceptable	
CBV	<LOQ	0.00325	%	< 0.00325	Acceptable	
CBE	<LOQ	0.00325	%	< 0.00325	Acceptable	
CBDA	<LOQ	0.00325	%	< 0.00325	Acceptable	
CBGA	<LOQ	0.00325	%	< 0.00325	Acceptable	
CBG	<LOQ	0.00325	%	< 0.00325	Acceptable	
CB	<LOQ	0.00325	%	< 0.00325	Acceptable	
THCV	<LOQ	0.00325	%	< 0.00325	Acceptable	
deltaTHCV	<LOQ	0.00325	%	< 0.00325	Acceptable	
THCVA	<LOQ	0.00325	%	< 0.00325	Acceptable	
CBN	<LOQ	0.00325	%	< 0.00325	Acceptable	
exo-THC	<LOQ	0.00325	%	< 0.00325	Acceptable	
deltaTHC	<LOQ	0.00325	%	< 0.00325	Acceptable	
deltaTHC	<LOQ	0.00325	%	< 0.00325	Acceptable	
9SdeltaTHC	<LOQ	0.00325	%	< 0.00325	Acceptable	
CB	<LOQ	0.00325	%	< 0.00325	Acceptable	
9RdeltaTHC	<LOQ	0.00325	%	< 0.00325	Acceptable	
CB	<LOQ	0.00325	%	< 0.00325	Acceptable	
THCA	<LOQ	0.00325	%	< 0.00325	Acceptable	
CBGA	<LOQ	0.00325	%	< 0.00325	Acceptable	
CBLA	<LOQ	0.00325	%	< 0.00325	Acceptable	
deltaTHCP	<LOQ	0.00325	%	< 0.00325	Acceptable	
CB	<LOQ	0.00325	%	< 0.00325	Acceptable	

Abbreviations

ND - None Detected at or above MRL
RPD - Relative Percent Difference
LOQ - Limit of Quantitation

Units of Measure:

% - Percent



12423 NE Whitaker Way
Portland, OR 97230
503-254-1794



Report Number: 23-006610/D002.R000
Report Date: 06/12/2023
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Purchase Order:
Received: 06/05/23 11:43

Revision: 1 Document ID: 7148
Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

JAOAC2015 V986							
Batch ID: 2307961							
Sample Duplicate							
Sample ID: 23-0065970001							
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation
CBDVA	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
CBDV	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
CBE	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
CBD	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
CBSA	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
CBS	0.0193	0.0193	0.00328	%	0.160	< 20	Acceptable
CBD	0.656	0.658	0.00328	%	0.323	< 20	Acceptable
THCV	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
deltaTHCV	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
THCVA	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
CBN	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
exo-THC	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
deltaTHC	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
9SdeltaTHC	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
CB	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
9RdeltaTHC	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
CB	0.00566	0.00565	0.00328	%	0.136	< 20	Acceptable
THCA	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
CBGA	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
CBLA	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
deltaTHCP	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable
CB	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable

Abbreviations

ND - None Detected at or above MRL
RPD - Relative Percent Difference
LOQ - Limit of Quantitation

Units of Measure:

% - Percent



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Revision 2 Document D 7087
Legacy D CFL-E33Effective

Laboratory Quality Control Results

Residual Solvents				Batch ID: 2307994					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		501	584	µg/g	85.8	60	120
Isobutane	ND	< 200		642	767	µg/g	83.7	60	120
Butane	ND	< 200		630	782	µg/g	80.6	60	120
2,2 Dimethylpropane	ND	< 200		886	939	µg/g	94.4	60	120
Methanol	ND	< 200		1340	1640	µg/g	81.7	60	120
Ethylene Oxide	ND	< 30		43.8	57.1	µg/g	76.7	60	120
2 Methylbutane	ND	< 200		1330	1600	µg/g	83.1	60	120
Pentane	ND	< 200		1340	1620	µg/g	82.7	60	120
Ethanol	ND	< 200		1380	1610	µg/g	85.7	70	130
Ethyl Ether	ND	< 200		1380	1610	µg/g	85.7	60	120
2,2 Dimethylbutane	ND	< 30		145	168	µg/g	86.3	60	120
Acetone	ND	< 200		1380	1620	µg/g	85.2	60	120
2 Propanol	ND	< 200		1370	1600	µg/g	85.6	60	120
Ethyl Formate	ND	< 500		1370	1600	µg/g	85.6	70	130
Acetonitrile	ND	< 100		401	484	µg/g	82.9	60	120
Methyl Acetate	ND	< 500		1510	1610	µg/g	93.8	70	130
2,3 Dimethylbutane	ND	< 30		131	162	µg/g	80.9	60	120
Dichloromethane	ND	< 60		417	483	µg/g	86.3	60	120
2 Methylpentane	ND	< 30		153	174	µg/g	87.9	60	120
M BE	ND	< 500		1550	1610	µg/g	96.3	70	130
3 Methylpentane	ND	< 30		144	168	µg/g	85.7	60	120
Hexane	ND	< 30		140	168	µg/g	83.3	60	120
1 Propanol	ND	< 500		1460	1600	µg/g	91.3	70	130
Methylethylketone	ND	< 500		1520	1620	µg/g	93.8	70	130
Ethyl acetate	ND	< 200		1330	1600	µg/g	83.1	60	120
2 Butanol	ND	< 200		1360	1600	µg/g	85.0	60	120
tetrahydrofuran	ND	< 100		443	514	µg/g	86.2	60	120
Cyclohexane	ND	< 200		1400	1600	µg/g	87.5	60	120
2 methyl 1 propanol	ND	< 500		1500	1610	µg/g	93.2	70	130
Benzene	ND	< 1		4.05	5.12	µg/g	79.1	60	120
Isopropyl Acetate	ND	< 200		1350	1620	µg/g	83.3	60	120
Heptane	ND	< 200		1330	1610	µg/g	82.6	60	120
1 Butanol	ND	< 500		1420	1600	µg/g	88.8	70	130
Propyl Acetate	ND	< 500		1470	1600	µg/g	91.9	70	130
1,4 Dioxane	ND	< 100		418	493	µg/g	84.8	60	120
2 Ethoxyethanol	ND	< 30		138	163	µg/g	84.7	60	120
Methylisobutylketone	ND	< 500		1640	1600	µg/g	102.5	70	130
3 Methyl 1 butanol	ND	< 500		1650	1610	µg/g	102.5	70	130
Ethylene Glycol	ND	< 200		419	483	µg/g	86.7	60	120
oluene	ND	< 100		402	493	µg/g	81.5	60	120
Isobutyl Acetate	ND	< 500		1430	1600	µg/g	89.4	70	130
1 Pentanol	ND	< 500		1330	1600	µg/g	83.1	70	130
Butyl Acetate	ND	< 500		1420	1600	µg/g	88.8	70	130
Ethylbenzene	ND	< 200		800	969	µg/g	82.6	60	120
m,p Xylene	ND	< 200		798	968	µg/g	82.4	60	120
o Xylene	ND	< 200		800	976	µg/g	82.0	60	120
Cumene	ND	< 30		132	162	µg/g	81.5	60	120
Anisole	ND	< 500		1350	1610	µg/g	83.9	70	130
DMSO	ND	< 500		1270	1610	µg/g	78.9	70	130
1,2 dimethoxyethane	ND	< 50		157	164	µg/g	95.7	70	130
riethylamine	ND	< 500		1520	1600	µg/g	95.0	70	130
N,N dimethylformamide	ND	< 150		437	484	µg/g	90.3	70	130
N,N dimethylacetamide	ND	< 150		371	489	µg/g	75.9	70	130
Pyridine	ND	< 50		153	172	µg/g	89.0	70	130
Sulfolane	ND	< 50		100	163	µg/g	61.3	70	130 Q6
1,2 Dichloroethane	ND	< 1		0.788	1	µg/g	78.8	70	130
Chloroform	ND	< 1		0.782	1	µg/g	78.2	70	130
richloroethylene	ND	< 1		0.752	1	µg/g	75.2	70	130
1,1 Dichloroethane	ND	< 1		0.753	1	µg/g	75.3	70	130



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Revision 2 Document D 7087
Legacy D CFL-E33Effective

QC - Sample Duplicate

Sample ID: 23-006209-0001

Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Accept/Fail	Notes
Propane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Isobutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Butane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2 Dimethylpropane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Methanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethylene Oxide	ND	ND	30	µg/g	0.0	< 20	Acceptable	
2 Methylbutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Pentane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Ether	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2 Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Acetone	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2 Propanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Formate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Acetonitrile	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Methyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
2,3 Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	60	µg/g	0.0	< 20	Acceptable	
2 Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
M BE	ND	ND	500	µg/g	0.0	< 20	Acceptable	
3 Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Hexane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
1 Propanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Methyl ethyl ketone	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Ethyl acetate	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2 Butanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
tetrahydrofuran	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Cyclohexane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2 methyl 1 propanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Benzene	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Isopropyl Acetate	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Heptane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
1 Butanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Propyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1,4 Dioxane	ND	ND	100	µg/g	0.0	< 20	Acceptable	
2 Ethoxyethanol	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Methyl isobutyl ketone	ND	ND	500	µg/g	0.0	< 20	Acceptable	
3 Methyl 1 butanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Ethylene Glycol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
oluene	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Isobutyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1 Pentanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Butyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Ethylbenzene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
m,p Xylene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
o Xylene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Cumene	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Anisole	ND	ND	500	µg/g	0.0	< 20	Acceptable	
DMSO	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1,2 dimethoxyethane	ND	ND	50	µg/g	0.0	< 20	Acceptable	
triethylamine	ND	ND	500	µg/g	0.0	< 20	Acceptable	
N,N dimethylformamide	ND	ND	150	µg/g	0.0	< 20	Acceptable	
N,N dimethylacetamide	ND	ND	150	µg/g	0.0	< 20	Acceptable	
Pyridine	ND	ND	50	µg/g	0.0	< 20	Acceptable	
Sulfolane	ND	ND	50	µg/g	0.0	< 20	Acceptable	
1,2 Dichloroethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Chloroform	ND	ND	1	µg/g	0.0	< 20	Acceptable	
richloroethylene	ND	ND	1	µg/g	0.0	< 20	Acceptable	
1,1 Dichloroethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	

Abbreviations

ND None Detected at or above MRL
RPD Relative Percent Difference
LOQ Limit of Quantitation

Units of Measure:

µg/g Microgram per gram or ppm



12423 NE Whitaker Way
Portland, OR 97230
503-254-1794



Report Number: 23-006610/D002.R000
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Explanation of QC Flag Comments:

Code	Explanation
Q	Matrix interferences affecting spike or surrogate recoveries.
Q1	Quality control result biased high. Only non-detect samples reported.
Q2	Quality control outside QC limits. Data considered estimate.
Q3	Sample concentration greater than four times the amount spiked.
Q4	Non-homogenous sample matrix, affecting RPD result and/or % recoveries.
Q5	Spike results above calibration curve.
Q6	Quality control outside QC limits. Data acceptable based on remaining QC.
R	Relative percent difference (RPD) outside control limit.
R1	RPD non-calculable, as sample or duplicate results are less than five times the LOQ.
R2	Sample replicates RPD non-calculable, as only one replicate is within the analytical range.
LOQ1	Quantitation level raised due to low sample volume and/or dilution.
LOQ2	Quantitation level raised due to matrix interference.
B	Analyte detected in method blank, but not in associated samples.
B1	The sample concentration is greater than 5 times the blank concentration.
B2	The sample concentration is less than 5 times the blank concentration.